WHAT IS CLAIMED IS:

1.   A database, comprising:

a first table for storing keys and look-up table identifiers in correspondence with each other; and

5   a second table for storing the look-up table identifiers and look-up tables in correspondence with each other, and

in that the look-up table can be searched via the look-up table identifier corresponding to the designated

10   key.

2.   The database according to claim 1, wherein said first table stores a plurality of look-up table identifiers for each key, and said second table stores the look-up tables in one-to-one correspondence with the

15   look-up table identifiers.

3.   The database according to claim 2, wherein said first table stores, as each key, a print mode including at least one of a paper type, quantization method, and print quality, and as each look-up table identifier, a

20   look-up table identifier of at least one of a color correction table, color conversion table, grayscale correction table, and quantization table, and said second table stores the look-up tables corresponding to the look-up table identifiers stored in said first table.

25   4.   A database management method, comprising:

the search step of searching the first table in a database of claim 3 for a look-up table identifier corresponding to a designated print mode; and

the table acquisition step of acquiring a look-up table corresponding to the look-up table identifier acquired in the search step from said second table.

5. A print control apparatus, comprising:

a first table for storing look-up table identifiers used in image data conversion in correspondence with keys that use print modes;

a second table for storing look-up tables corresponding to the look-up table identifiers stored in said first table;

search means for searching said first table for a look-up table identifier corresponding to a designated print mode;

table acquisition means for acquiring a look-up table corresponding to the look-up table identifier acquired by said search means from said second table; and

image processing means for processing image data using the acquired look-up table.

6. The apparatus according to claim 5, wherein said first table includes, as each key, at least one of a paper type, quantization method, and print quality, and as each look-up table identifier, at least one of a

color correction table, color conversion table, grayscale correction table, and quantization table, and said image processing means executes at least one of color correction, color conversion, grayscale correction, and quantization for image data using the acquired table.

5   7.   The apparatus according to claim 5, further comprising output means for outputting the image data processed by said image processing means.

8.   A print control method using a first table for

10   storing look-up table identifiers used in image data conversion in correspondence with keys that use print modes, and a second table for storing look-up tables corresponding to the look-up table identifiers stored in said first table, comprising:

15   the search step of searching said first table for a look-up table identifier corresponding to a designated print mode;

the table acquisition step of acquiring a look-up table corresponding to the look-up table identifier

20   acquired in the search step from said second table; and

the image processing step of processing image data using the acquired look-up table.

9.   The method according to claim 8, wherein said first table includes, as each key, at least one of a

25   paper type, quantization method, and print quality, and as each look-up table identifier, at least one of a

color correction table, color conversion table,
grayscale correction table, and quantization table, and
the image processing step includes the step of executing
at least one of color correction, color conversion,
5   grayscale correction, and quantization for image data
using the acquired table.

10.   A computer readable storage medium characterized
by storing a computer program which makes a computer
implement:

10   search means for searching a first table for
storing look-up table identifiers used in image data
conversion in correspondence with keys that use print
modes for a look-up table identifier corresponding to a
designated print mode;

15   table acquisition means for acquiring a look-up
table corresponding to the look-up table identifier
acquired by said search means from a second table for
storing look-up tables corresponding to the look-up
table identifiers stored in said first table; and

20   image processing means for processing image data
using the acquired look-up table.

11.   An information processing apparatus, comprising:
    a processing module; and
    a database corresponding to a given apparatus, and

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in that said processing module has a search unit
in which information used to access the database
corresponding to the selected apparatus is set.

12. The apparatus according to claim 11, wherein the
apparatus is a printer.

13. The apparatus according to claim 11, wherein said
database is a database of claim 1.

14. The apparatus according to claim 11, wherein said
processing module includes an image processing module
and binary processing module.

15. The apparatus according to claim 11, wherein a
plurality of processing modules equivalent to said
processing modules are present.

16. The apparatus according to claim 11, wherein a
plurality of databases equivalent to said database are
present.

17. An information processing method which uses a
processing module and a database corresponding to a
given apparatus,

wherein upon selecting the apparatus, information
used to access the database corresponding to the
selected apparatus is set in a search unit of said
processing module.

18. The method according to claim 17, wherein the
apparatus is a printer.

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19.   The method according to claim 17, wherein said
database is a database of claim 1.

20.   The method according to claim 17, wherein
processing module includes an image processing module
and binary processing module.

21.   The method according to claim 17, wherein a
plurality of processing modules equivalent to said
processing modules are present.

22.   The method according to claim 17, wherein a
plurality of databases equivalent to said database are
present.

23.   A printer driver, comprising:

    a processing module; and

    a database corresponding to a printer, and

    in that said processing module has a search unit
in which information used to access the database
corresponding to the selected printer is set.

24.   The driver according to claim 23, wherein said
database is a database of claim 1.

25.   The driver according to claim 23, wherein said
processing module includes an image processing module
and binary processing module.

26.   The driver according to claim 23, wherein a
plurality of processing modules equivalent to said
processing modules are present.

27. The driver according to claim 23, wherein a plurality of databases equivalent to said database are present.

28. A print control apparatus for executing an image process in accordance with an output apparatus, comprising:

generation means for generating a look-up table according to characteristic information of the output apparatus;

storage means for storing the generated look-up table in correspondence with an identifier of the output apparatus; and

image processing means for executing a process such as correction, conversion, or the like for image data using the look-up table corresponding to the identifier.

29. The apparatus according to claim 28, further comprising input means for inputting the characteristic information, and in that said generation means generates the look-up table in accordance with the input characteristic information.

30. The apparatus according to claim 28, further comprising acquisition means for acquiring the characteristic information on the basis of predetermined image data, and a measurement result of density information or the like that pertains to an output image

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of the image data, and in that said generation means
generates the look-up table in accordance with the
acquired characteristic information.

31.   The apparatus according to claim 28, wherein the
5 look-up table includes a look-up table for grayscale
correction.

32.   The apparatus according to claim 28, wherein the
output apparatus is a printer apparatus (IJRA) using an
exchangeable print head, and the identifier and
10 characteristic information are held in the print head.

33.   The apparatus according to claim 32, wherein the
characteristic information includes rank information
indicating an ink ejection state.

34.   The apparatus according to claim 28, further
15 comprising holding means for holding a look-up table
generated in advance and in that when a characteristic
of the output apparatus is unknown, said image
processing means executes a process for image data using
the look-up table held in said holding means.

20 35.   A print control method for executing an image
process in accordance with an output apparatus,
comprising:

the generation step of generating a look-up table
according to characteristic information of the output
25 apparatus;

the storage step of storing the generated look-up

table in correspondence with an identifier of the output

apparatus; and

the image processing step of executing a process

5   such as correction, conversion, or the like for image

data using the look-up table corresponding to the

identifier.

36.   The method according to claim 35, further

comprising the input step of inputting the

10   characteristic information, and in that the generation

step includes the step of generating the look-up table

in accordance with the input characteristic information.

37.   The method according to claim 35, further

comprising the acquisition step of acquiring the

15   characteristic information on the basis of predetermined

image data, and a measurement result of density

information or the like that pertains to an output image

of the image data, and in that the generation step

includes the step of generating the look-up table in

20   accordance with the acquired characteristic information.

38.   The method according to claim 35, wherein the

look-up table includes a look-up table for grayscale

correction.

39.   The method according to claim 35, wherein the

25   output apparatus is a printer apparatus (IJRA) using an

exchangeable print head, and the identifier and characteristic information are held in the print head.

40.   The method according to claim 39, wherein the characteristic information includes rank information indicating an ink ejection state.

41.   The method according to claim 35, wherein the image processing step includes the step of executing a process for image data using a look-up table which is generated and held in advance when a characteristic of the output apparatus is unknown.

42.   A computer readable storage medium characterized by storing a computer program which make a computer implement:

   generation means for generating a look-up table according to characteristic information of the output apparatus;

   storage means for storing the generated look-up table in correspondence with an identifier of the output apparatus; and

   image processing means for executing a process such as correction, conversion, or the like for image data using the look-up table corresponding to the identifier.

43.   The medium according to claim 42, wherein said computer program makes the computer further implement input means for inputting the characteristic information,

and makes said generation means generate the look-up table in accordance with the input characteristic information.

44. The medium according to claim 42, wherein said computer program makes the computer further implement acquisition means for acquiring the characteristic information on the basis of predetermined image data, and a measurement result of density information or the like that pertains to an output image of the image data, and makes said generation means generate the look-up table in accordance with the acquired characteristic information.

45. The medium according to claim 42, wherein the look-up table includes a look-up table for grayscale correction.

46. The medium according to claim 42, wherein the output apparatus is a printer apparatus using an exchangeable print head, and the identifier and characteristic information are held in the print head.

47. The medium according to claim 46, wherein the characteristic information includes rank information indicating an ink ejection state.

48. The medium according to claim 42, wherein said computer program makes said image processing means execute a process for image data using a look-up table

which is generated and held in advance when a characteristic of the output apparatus is unknown.

49.   A link information search apparatus, comprising:

changed value storage means for storing changed information;

current value storage means for storing unchanged information;

link information storage means for storing link information required for optimizing the unchanged information upon the change;

reference information determination means for determining link information to be referred to for the optimization;

extraction condition setting means for setting a condition required for extracting link information from said link information storage means; and

setup value information replace means for updating information stored in said current value storage means on the basis of the extracted link information.

50.   The apparatus according to claim 49, wherein the link information is stored while being classified in units of setup contents.

51.   The apparatus according to claim 49, wherein the condition required for extracting the link information is stored in units of classified setup contents.

52.   The apparatus according to claim 49, wherein link information to be referred to is determined to optimize a print result in accordance with change input from input means.

5   53.   A link information search method comprising:

the changed value storage step of storing changed information in a first memory;

the current value storage step of storing unchanged information in a second memory;

10   the link information storage step of storing in a third memory link information required for optimizing the unchanged information upon the change;

the reference information determination step of determining link information to be referred to for the

15   optimization;

the extraction condition setting step of setting a condition required for extracting link information stored in the third memory; and

the setup value information replace step of

20   updating information stored in the second memory on the basis of the extracted link information.

54.   The method according to claim 53, wherein the link information is stored in the third memory while being classified in units of setup contents.

55.   The method according to claim 53, wherein the condition required for extracting the link information is stored in units of classified setup contents.

56.   The method according to claim 53, wherein link

5   information to be referred to is determined to optimize a print result in accordance with change input from input means.

57.   A computer readable storage medium storing a program for searching for and updating link information

10   to optimize unchanged information upon changing information, said program, comprising:

a code of the changed value storage step of storing changed information in a first memory;

a code of the current value storage step of

15   storing unchanged information in a second memory;

a code of the link information storage step of storing in a third memory link information required for optimizing the unchanged information upon the change;

a code of the reference information determination

20   step of determining link information to be referred to for the optimization;

a code of the extraction condition setting step of setting a condition required for extracting link information stored in the third memory; and

a code of the setup value information replace step
of updating information stored in the second memory on
the basis of the extracted link information.

58.   An image processing apparatus, comprising means
for searching for a link condition on the basis of a
link information search apparatus of claim 49, and
offering a condition that can be set in accordance with
the search result.

59.   The apparatus according to claim 58, wherein said
image processing apparatus includes a printer and
facsimile apparatus.

60.   An image processing method comprising the step of
searching for a link condition on the basis of a link
information search method of claim 53, and offering a
condition that can be set in accordance with the search
result.

61.   The apparatus according to claim 49, further
comprising extraction means for extracting link
information on the basis of the link information to be
referred to, which is determined by said reference
information determination means, and data of the
extraction condition set by said extraction condition
setting means.

62.   The apparatus according to claim 49, further
comprising display means for displaying a setup value by

changing the setup value to a setup value replaced by said setup value information replace means.

63.   The apparatus according to claim 62, wherein said display means displays an unselectable setup value to be

5   unselectable and a selectable setup value to be selectable in accordance with the extracted link information.

64.   A link information setting apparatus, comprising:

acquisition means for acquiring an ID of a link

10   information storage section corresponding to a changed item;

setting means for setting an extraction condition of the link information storage section having the acquired ID;

15   extraction means for extracting link information from the link information storage section having the acquired ID in accordance with the set extraction condition; and

change means for changing a setup value when the

20   setup value is different from the extracted link information.

65.   The apparatus according to claim 64, further comprising means for displaying an unselectable setup value to be unselectable and a selectable setup value to

25   be selectable in accordance with the extracted link information.

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66.   The apparatus according to claim 65, wherein the link information includes an appropriate setup value.

67.   The apparatus according to claim 65, wherein the link information includes a setup item, setup value, and

5   processing contents.

68.   The method according to claim 53, further comprising the extraction step of extracting link information on the basis of the link information to be referred to, which is determined in the reference

10   information determination step, and data of the extraction condition set in the extraction condition setting step.

69.   The method according to claim 53, further comprising the display step of displaying a setup value

15   by changing the setup value to a setup value replaced in the setup value information replace step.

70.   The method according to claim 69, wherein the display step includes the step of displaying an unselectable setup value to be unselectable and a

20   selectable setup value to be selectable in accordance with the extracted link information.

71.   A link information setting method, comprising:

the acquisition step of acquiring an ID of a link information storage section corresponding to a changed

25   item;

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the setting step of setting an extraction

condition of the link information storage section having

the acquired ID;

the extraction step of extracting link information

5   from the link information storage section having the

acquired ID in accordance with the set extraction

condition; and

the change step of changing a setup value when the

setup value is different from the extracted link

10   information.

72.   The method according to claim 71, further

comprising the step of displaying an unselectable setup

value to be unselectable and a selectable setup value to

be selectable in accordance with the extracted link

15   information.

73.   The method according to claim 71, wherein the link

information includes an appropriate setup value.

74.   The method according to claim 71, wherein the link

information includes a setup item, setup value, and

20   processing contents.

75.   A storage medium storing a program code for making

computer execute a link information setting method, said

program code comprising:

a code of the acquisition step of acquiring an ID

25   of a link information storage section corresponding to a

changed item;

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a code of the setting step of setting an extraction condition of the link information storage section having the acquired ID;

a code of the extraction step of extracting link information from the link information storage section having the acquired ID in accordance with the set extraction condition; and

a code of the change step of changing a setup value when the setup value is different from the extracted link information.

76. A print control apparatus, comprising:

storage means for storing identification information for identifying print conditions, and paper size-dependent parameters based on the identification information; and

margin information generation means for searching for the stored identification information and parameters in accordance with print information, and generating corresponding margin information.

77. The apparatus according to claim 76, wherein said storage means has an index table for storing ID numbers classified in units of print conditions, and a data table for storing paper size-dependent margin information in units of ID numbers.

78. The apparatus according to claim 76, wherein said margin information generation means computes vertical

and horizontal printable areas when the print

information designates user-defined paper.

79.   A print control method, comprising:

the storage step of storing in a memory

5 identification information for identifying print

conditions, and paper size-dependent parameters based on

the identification information; and

the margin information generation step of

searching for the stored identification information and

10 parameters stored in the memory in accordance with print

information, and generating corresponding margin

information.

80.   The method according to claim 79, wherein the

storage step includes the step of storing in the memory

15 an index table for storing ID numbers classified in

units of print conditions, and a data table for storing

paper size-dependent margin information in units of ID

numbers.

81.   The method according to claim 79, wherein the

20 margin information generation step includes the step of

computing vertical and horizontal printable areas when

the print information designates user-defined paper.

82.   A storage medium storing a program for offering

margin information for print control, said program,

25 comprising:

a code of the storage step of storing in a memory identification information for identifying print conditions, and paper size-dependent parameters based on the identification information; and

5   a code of the margin information generation step of searching for the stored identification information and parameters stored in the memory in accordance with print information, and generating corresponding margin information.

10   83.   A print control apparatus, comprising:

a first table for storing a search condition;

a second table for storing data of a value corresponding to the search condition;

search means for searching said first table for

15   the search condition on the basis of a given condition, and searching said second table for data of a value corresponding to the found search condition; and

table maintenance means for changing the search condition stored in said first able and changing the

20   value which is stored in said second table and corresponds to the changed search condition, when the search condition has been changed.

84.   The apparatus according to claim 83, further comprising correction means for correcting an image, and

25   in that said search means searches said first and second tables for a look-up table for image correction, and

said correction means corrects the image with reference
to the look-up table.

85.   The apparatus according to claim 83, further
comprising setting means for setting a print setup value,

5   and in that said search means searches said first and
second tables for an appropriate combination of print
setup values, and said setting means makes a user input
a setup value with reference to the appropriate
combination.

10   86.   The apparatus according to claim 83, further
comprising margin setting means for setting a print
margin, and in that said search means searches said
first and second tables for an appropriate print margin,
and said margin setting means offers the appropriate

15   print margin to a user.